SBSS Express Seminars Architecture Seminar Script.

SBSS Express Seminars Architecture Seminar Script

Architecture is a profession requiring design, engineering, financial, project management and communications capabilities. The remarkable versatility and functionality of the Macintosh make it a great fit for this market, specifically for smaller firms.

While 66% of firms have some computerized capabilities,[1] 92% are projected to have them by 1992[2]—a trend which offers enormous potential for you. This seminar is designed especially for smaller firms which make up 83% of the market, and where computer penetration is lowest.

This SBSS Express Seminars Business Solution will help you to present effectively to architects. Using these demonstrations in a seminar will allow you to highlight some of the most important business tasks these customers need to perform and get many key benefits across in a short period of time.

To enhance your demonstrations, you may want to use some relevant findings of recent research studies. The results highlighted below can add impressive proof to the benefits and advantages of owning an Apple Macintosh personal computer.

Productivity

In an architectural firm, work may be billed as a stipulated sum (agreed-upon fee). Working more efficiently can mean higher billings per person. So increased productivity is an important selling point for Macintosh. You can tell your seminar audience that all Macintosh applications work virtually the same way, so once they've learned one, they're on their way to learning them all. According to an independent study, a base of consistent applications is the most important factor for increasing users' productivity.[3]

Training/Installation

Because architects work under strict deadlines, they can't afford to take a week off to learn to use a computer. They may also need to get new or temporary employees up to speed fast. So ease of training is important and a short learning curve is a real benefit. Most people don't consider the impact of training on their purchase costs. However, in an independent survey Macintosh users rated their productivity 37% higher than MS-DOS users rated their productivity, and 32% higher than users of Windows 2.0.[4]

Another key point you may want to incorporate throughout your seminar is that there are thousands of programs in virtually all areas of business available for the Macintosh. Architects will be especially interested to know that industry-specific programs are available for conceptual design, design and drafting, analysis, interior design, building specifications and more.

Compatibility/Connectivity

Compatibility and connectivity capabilities are especially important to architects. The Macintosh allows them to exchange information electronically with contractors, engineers and suppliers, thereby saving time and money on a project. Your audience should know that Macintosh has the capability to read from and write to MS-DOS, Windows and UNIX. You may want to demonstrate these benefits by running the compatibility and connectivity demo, which is included on your Express Seminars CD.

Price/Value Comparison

Since architects look to computers to reduce costs and increase productivity, you may want to remind them that Macintosh systems can ultimately be less expensive than other personal computer systems because training costs, networking costs and overall support costs are much lower.[5] And when they are ready to upgrade their systems, Macintosh provides cost-effective growth paths.

You can also emphasize the affordability and value of Macintosh systems. Since they have more built-in features, they can do more for less money. A recent study concludes that, overall, Macintosh computers offer the best price-performance value, when compared with similarly configured IBM and Compaq personal computers.[6]

All of these points can help you build to a natural conclusion containing this kind of "bottom line" message: Macintosh is a powerful, versatile business tool that can make architects more productive in virtually every aspect of their business. And this consistent, proven technology can be theirs at a truly affordable price.

Preparation Notes

Like the original SBSS Architecture Business Solution, each folder contains applications that perform the functions indicated by the folder name. These demonstrations have been designed with architecture needs in mind and for presentation to a group.

As before, we have used a "Say This, Do This, Show This" format to provide easy instructions for demonstrations. We've also included a MediaTracks version of each demonstration so you can use a self-running presentation, if you choose.

Here are the contents of the Architecture Business Solution for Express Seminars.

Business Management:

- Project Management/MacProject II
- Overhead Calculations/Microsoft Excel
- Building Program/Microsoft Excel
- Project Drawings/ClarisCAD

Accounting:

- Time & Billing/Timeslips III
- Timeslip Reports/Timeslips III

Business Development:

- Client Information/FileMaker Pro
- Client Letter/MacWrite II

Firm Management:

- Forms/FileMaker Pro
- 255 Form/PageMaker
- Word Processing/Microsoft Word
- Office Communications/MediaTracks/QuickMail

Marketing & Presentations:

- Project Profile/PageMaker
- Project Presentation/Aldus Persuasion

Design Process:

- Bubble Diagram/ClarisCAD
- Conceptual Design/Upfront by Alias
- Building Code Analysis/HyperCard/Building Code Analyst
- Computer Aided Visualization/Virtus WalkThrough

[1] ***Qualitative Marketing,*** 1990

[2] ***Sweet's Survey in*** **Architectural Record,** November, 1989

[3] ***Gartner Group,*** June 1989

[4] ***Diagnostic Research, Inc.,*** March, 1990

[5] ***Gartner Group,*** June 1989

[6] ***Ingram Laboratories*,*** February, 1991

To assign a price-performance value to the systems tested, a ratio was calculated using the manufacturer's suggested retail price (SRP) and Ingram's results. The ratio is calculated by dividing a given system's performance index by the system's SRP. The greater the price-performance value, the greater the system's value to the customer (that is, a system with a .5 ratio offers greater value than a .3 system).

Based on manufacturer's suggested retail prices as of February, 1991. Current SRPs may have changed.

Industry Overview

The Market

- 143,000 architects in the United States.
- 94% of architectural firms have only one office.
- 83% of all firms have fewer than 10 full-time staff members.
- Firms pass 25% of revenues through to consultants, marking-up this cost to the client.
- Areas of specialization include:
  - Commercial design
  - Space planning/facilities management
  - Residential home design and remodeling
  - Corporate
  - Institutional
  - Multi-family and hotel
  - Interior design

The Opportunity

- 66% of architectural firms use computers; 40% of those have two or more systems, and 10% having over five systems. Overall, it is projected that 92% of all firms will have computer capabilities by 1992.
- General productivity tasks are often overshadowed by CAD and drafting systems. However approximately two thirds of an architect's time is spent in general productivity, with the remaining one third in design and drafting. Hence, architects often reap greater rewards from automating general productivity tasks than others.
- 25% of the top firms have focused on specialities and expanded their services to maintain a competitive edge.
- Architectural firms look to computers to:
  - Reduce costs while increasing productivity and enhanced image
  - Remain competitive
  - Cope with day-to-day business activities
  - Expand the type of services offered to clients
  - Internalize jobs normally farmed out to consultants
  - Handle marketing services vital to the firm's well-being
- Departments most open to computers include: marketing, design and production, engineering specifications and administration.

The Target

- Firm organization:
  - Principals/partners
  - Project managers/associates
  - Project architects
  - Job captains
  - Architects
  - Draftsmen
  - Financial
  - Administrative
  - Engineering (on-staff or as consultants)
- Salaries of principals range from $47,800 for sole practitioners to $99,100 for firms with 20 or more employees.
- Education varies, but generally architects have a four- or five-year degree and three years experience prior to licensing.
- Both peer influence and prominent accounts play a significant role in generating new business opportunities.

Market Challenges/Solutions

Challenges:

- It's important to highlight MS-DOS compatibility as many firms will need to share files with an MS-DOS system and are unaware of the Macintosh computer's ability to utilize MS-DOS data and applications.
- Some architectural firms may hesitate to automate design functions because of architects who prefer hand-drawn renderings and services.

Specific Firm Concerns:

- Better communications with:
  - Clients/owners
  - Communities
  - Contractors/builders
  - Consultants
  - Regulatory agencies
- Quality control and coordination
- Risk and liability management
- Cost-effective project delivery processes
- Enhanced marketing capabilities
- High quality design solutions

Key Solutions:

- Demonstrate MS-DOS compatibility (the new C&C Extension will be helpful here).
- Emphasize ease-of-use and how minimal training time adds up to significant savings.
- Highlight the many Macintosh applications for the architectural marketplace.

For more detailed information, please refer to your Apple Market Model Guide.

Source: The Apple Market Model Guide. © Apple Computer, Inc., © Qualitative Marketing, 1990.

Using the Automated Business Solution Demonstrations

Each of the six folders appearing in the Architecture demonstration has been recorded separately in color MediaTracks. You may select the order in which you would like to demonstrate them. At the bottom of the screen you will find 3 buttons that will allow you to navigate through each demonstration.

Play Button (▶) – Allows you to continually move forward.

Pause Button (⏸) – Allows you to momentarily stop the demonstration.

Stop Button (■) – Allows you to quit the demonstration.

In addition to those icons, MediaTracks will allow you to control the playback of tapes by using the Macintosh keyboard. Below is a list of the commands and the keys that activates the demonstration.

Launching the Automated Business Solutions

- Open Express Seminars Solutions folder.
- Open Automated Demonstrations folder.
- Open Architecture folder.
- Open Architecture tape icon to begin.

General Tips

Display or Hide the Control Panel

Pressing the "H" key on the keyboard will display the control panel for MediaTracks. Clicking on any one of the icons activates them. Pressing the "H" key again will shrink the control panel into an icon. You can hide the icon by holding down the Option key and clicking the icon.

Speed Control

Pressing the "Up Arrow" (↑) on the keyboard will speed up the playback of the tape.

Pressing the "Down Arrow" (↓) on the keyboard will slow down the playback of the tape.

Pause

By pressing the "P" key, you pause the playback of the tape. Pressing the key once more will cause the tape to play again.

Stop

To stop a tape press the "S" key. Most of the time this will also cause MediaTracks to quit, taking you back to the Finder.

Rewind (Start over)

To replay a tape from the beginning press the "[" key.

Repeat

Pressing the "A" key will cause MediaTracks to replay the current tape over continuously. To turn off this feature press the "A" key once more. Pressing the "S" key will still stop the tape playback.

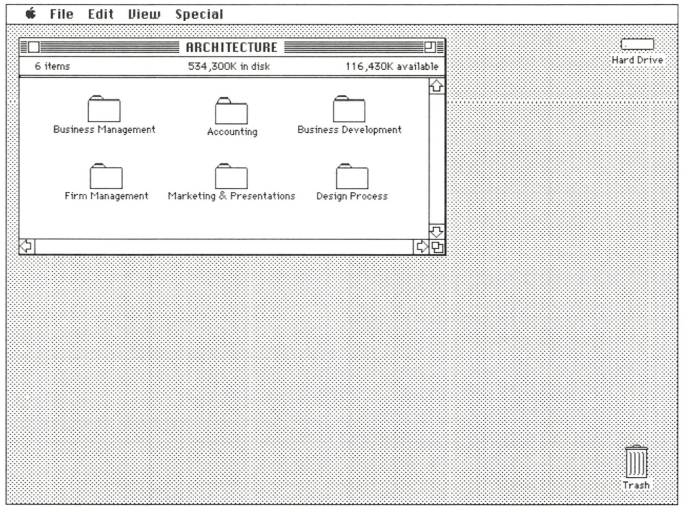
Skip Forward

To skip immediately to the beginning of the next feature, press the "forward arrow" (→) key.

Skip Back

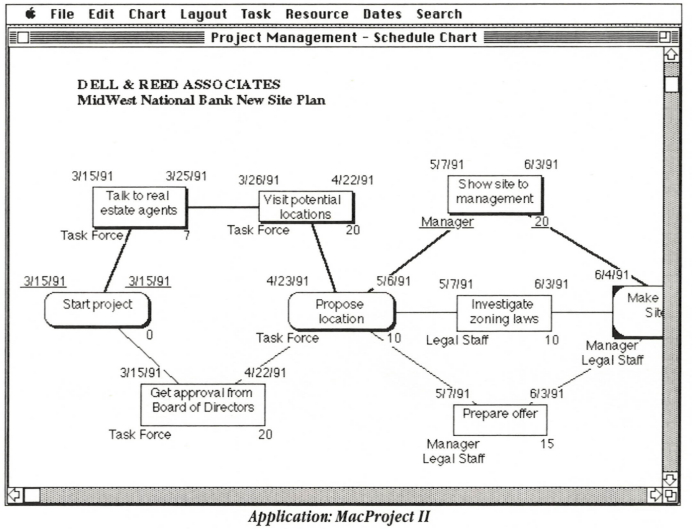
Pressing the "backward arrow" (←) key takes you back to the beginning of the current tape.

Architecture

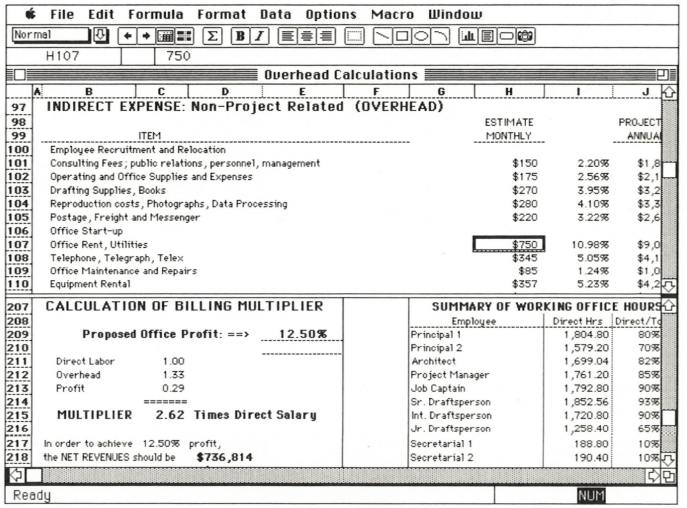
Say This	Do This	MediaTracks Do This	Show This
In today's business climate, you have to be versatile to stay competitive. And Apple Macintosh computers can help you run your entire firm more efficiently because it's as versatile as you are. Offering thousands of powerful software applications to choose from, Macintosh personal computers work for you to provide better service to your clients — and improve your bottom line.	Open **Hard Drive** by double clicking the icon or by selecting it (clicking once) and choosing **Open** under File menu. Open **Architecture** folder. ▸	Open **Architecture** tape icon.	
The design process is one of the most important aspects of any architectural firm. Not to mention business management, accounting, business development, firm management, marketing and presentations which are all part of the functions you manage daily. We'll go through examples of how Macintosh can help with each area. Notice that Macintosh is organized like your office is — no directories or complicated commands. Just folders showing the work that needs to be done.	Use the mouse to move the pointer over each folder as you name it.		
As you'll see throughout this demonstration, all Macintosh software programs share consistent menus and use commands in plain English, like, cut, copy and paste. There's even an undo command if you change your mind about something you've just done.	Use the mouse to highlight the pull-down menus, pointing out some common commands in the Edit menu.		

Business Management

Say This	Do This	MediaTracks Do This	Show This
Keeping firm control over every project that goes through your office can help you control costs and improve your management process.	Open **Business Management** folder. Open **Project Management** document. ▸	Click on **Business Management** folder to launch demonstration.	
Architectural projects can involve many people – project managers, engineers, drafters – with everyone working under different deadlines. Macintosh gives you the flexibility to adapt quickly to changes and keep projects on schedule and on budget. • Let's say you just found out that preparing the offer will be 10 days late. We'll change the number of days allocated from 15 to 25 and every other date will be automatically recalculated. • And, if your end date simply can't change, you can "freeze" it, allowing all other dates to be recalculated and critical times to be highlighted.	Click inside **Prepare offer** box. Choose **Show Task Info** from Task menu. Change Task Duration from 15 to 25 days. Close **Prepare offer** window. Click **OK** when Task Duration box appears. Note change in critical path. Show the change in **dates** (upper right corner of the **Prepare offer** box). Choose **Project Table** from Chart menu. Review **task boxes**, noting how they list earliest start, latest finish, resource required and elapsed time. Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears.	Click on **play** button (▶) to continue throughout.	
You can also use the Macintosh to manage the financial aspects of each project. Here's an example of a job estimate which calculates overhead expenses automatically. • You can quickly determine what expenses to include in your estimates. • Or use the Macintosh as a planning tool by changing budget variables or multiplier rates. By automating these calculations, you're likely to improve the accuracy of your bids and increase profitability on your projects.	Open **Overhead Calculations** document. ▸ Click **cell H107** and type **1500**. Note Multiplier rate in cell C215. Press **Return** key to enter new amount ($1,500). Note change in Multiplier in cell C215. Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears.		

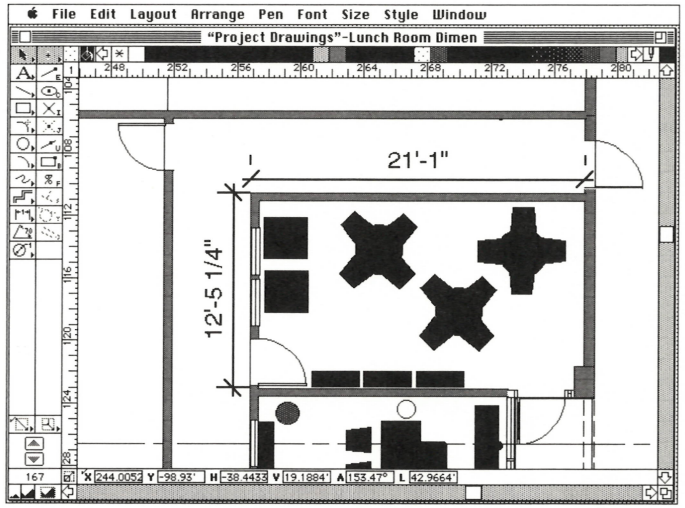


Application: MacProject II


File Edit Formula Format Data Options Macro Window
Overhead Calculations
INDIRECT EXPENSE: Non-Project Related (OVERHEAD)
CALCULATION OF BILLING MULTIPLIER
SUMMARY OF WORKING OFFICE HOURS
Ready

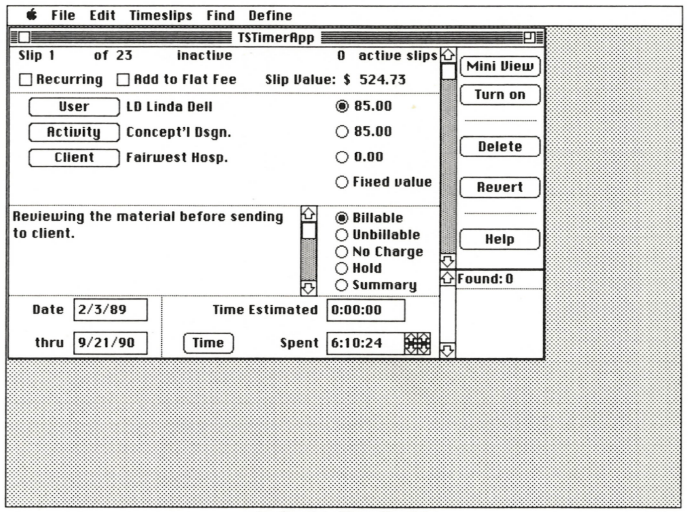
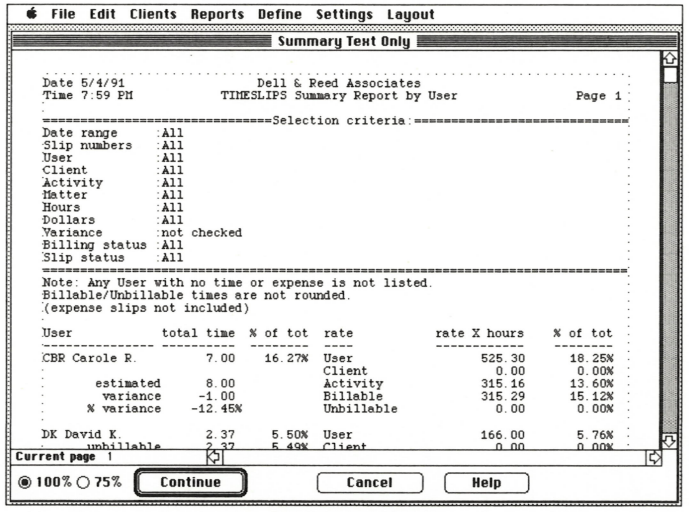
Application: Microsoft Excel

Say This	Do This	MediaTracks Do This	Show This
As a project develops, a slight change in square footage in one room can radically affect other room dimensions, to say nothing of overall cost. Calculating those changes can be tedious and time-consuming. With Macintosh, you can make these changes quickly and accurately. • When you enter a new figure, the total is recalculated and it automatically updates the building program chart, as you see here. • This can help you explain changes to clients, especially the impact of scaling individual elements up or down.	Open **Building Program** document. Choose **Open** from File menu and open **Building Program Chart** document. Click **Building Program** window to make it active. Click **cell D9** (Sound Stage/Studio) and type **7000**. Press **Return** key to enter new figure (7,000). ▸ Click **D11** (Storage) and type **12,000**. Press **Return** key to enter new figure (12,000). Click **Building Program Chart** window to make it active. Note how graph changes. Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears. (This occurs twice.)	• • •

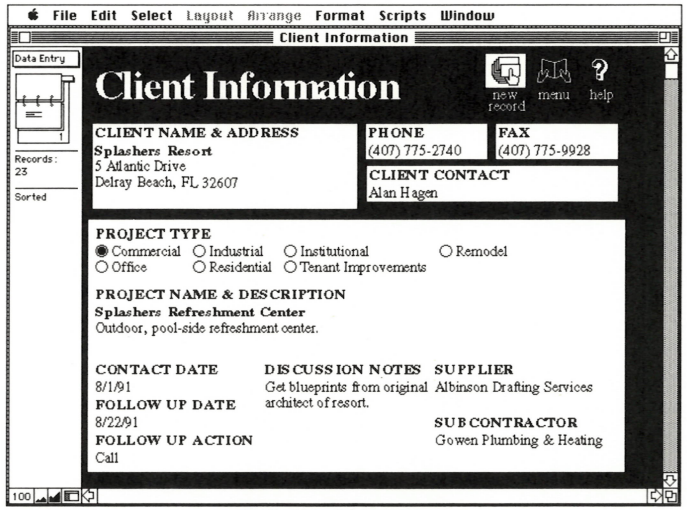
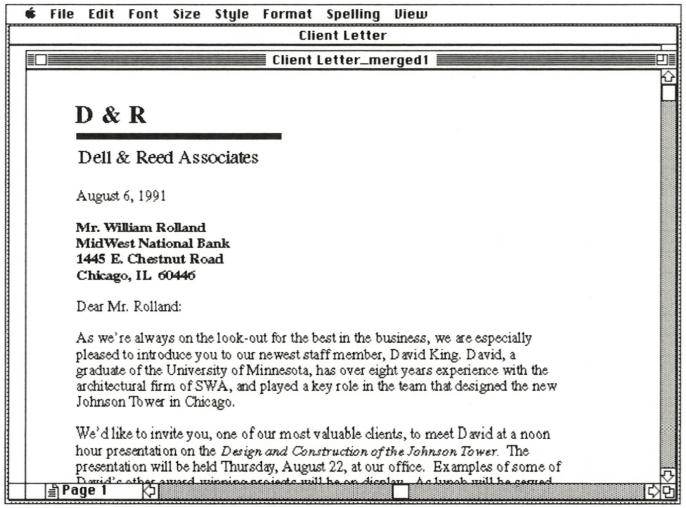
Say This	Do This	MediaTracks Do This	Show This
When you're ready to do final working drawings, the Macintosh makes it a snap, right down to the last dimension. • Look at how calculating dimensions has been simplified. You can determine the exact size of each room element. This is sure to help when changes occur and you must know the impact on your client's budget.	Repeat process to calculate other lunch room wall dimensions. ▸ Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears.	•	
Macintosh makes almost every business task easier to manage. And, since the Macintosh lets you work on multiple projects simultaneously, you'll be able to work like you always do — on several jobs at once.	Close **Business Management** folder.	End of demonstration.	

Application: ClarisCAD

Accounting

Say This	Do This	MediaTracks Do This	Show This
Macintosh accounting programs can help you manage all your financial information better. With financial data on your computer, you'll have instant access to accounts receivable and payable, payroll and general ledger.	Open **Accounting** folder. Open **Time & Billing** document and immediately hold down **Shift** key until dialog box appears. Select **Resident Data Set** and click **Open**. ▸	Click on **Accounting** folder to launch demonstration.	
Your ability to manage project profitability hinges on an accurate accounting of everyone's time. Macintosh can help you track time and billing with automatic time reports. • Think of how many times a day you take client calls. That time can really add up and often it's left unbilled. • While you're talking, this built-in "stop-watch" will track your time and automatically transfer it to an invoice to help you recover that "lost" time.	Choose **New Timeslip** from Timeslips menu to create a new slip. Click **User** button. Highlight a user from list, then click **Select** button. Click **Activity** button. Highlight an activity from list, then click **Select** button. Click **Client** button. Highlight a client from list, then click **Select** button. Click **Turn on** button to activate timer. Click **Mini View** button. Click **Turn off** button when you are done. Choose **Quit** from File menu.	•	 *Application: Timeslips III*
With a time and billing function in place, you're able to create reports that tell you which jobs are profitable and which aren't. The report shown here also analyzes estimated vs. actual time spent on a project and the percent of variance. With that information you'll be able to estimate future jobs more accurately.	Open **Timeslip Reports** document. Choose **Continue** when dialog box appears. Choose **Timeslips** from Reports menu. Choose **Summary Text Only** from Report type pop-up menu. Click **Print** button to view report. ▸ Click **Cancel** button to close report window. Choose **Quit** from File menu.	Click on **play** button (▶) to continue throughout.	 *Application: Timeslips III*
Now let's look at ways you can use a Macintosh in your business development efforts.	Close **Accounting** folder.	End of demonstration.	

Business Development

Say This	Do This	MediaTracks Do This	Show This
Having access to the most current information on clients, suppliers, subcontractors and prospective clients can be a great help in developing your business and improving client service. • With Macintosh, you have the ability to collect, organize and manage the information you need like: addresses, phone numbers, time between calls or a recap of your last meeting. Similar information on subcontractors and suppliers can be accessed by anyone in your office. You can also run a variety of reports from your database.	Open **Business Development** folder. Open **Client Information** document. ▸ Highlight **Client Address** text box, then type in a new address. Click below **Supplier** box to see selection options. Double click a supplier to select. Repeat process for subcontractors. Click bottom of **Book** icon (⊟ – upper left corner of screen) and browse through several records. Click **Menu** icon to see report options. Click **Supplier Report** icon. Click **50** button in lower left corner to view at actual size. Click **Continue** button. Click **Data Entry (pencil and pad)** icon. Choose **Quit** from File menu.	Click on **Business Development** folder to launch demonstration. • • Click on **play** button (▶) to continue throughout. • • • • • • • • • • • End of demonstration.	 *Application: FileMaker Pro*
You can also use Macintosh to customize correspondence. Here's an example where we've merged the client information from our database into an announcement letter. • Simply indicate the information you need for your letter such as name, title and company. That information is automatically merged with the letter. This feature allows you to quickly generate letters that appear to be tailor-made for each individual. Information stored on a Macintosh can help you manage your business and once it's entered you can use it in many different ways. With Macintosh, you can boost productivity and improve communications at the same time.	Open **Client Letter** document. Choose **Open Merge Data File** from File menu. Open **Client List** document. Close **Insert Merge Field** window. Choose **Merge** from File menu. Click **New Document** button, then click **Merge** button in Merge dialog box. ▸ Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears. Close **Business Development** folder.		 *Application: MacWrite II*

Firm Management

Say This

Automating routine but necessary tasks lets you handle them more quickly and can give you more time to do what you do best. With Macintosh, you can be more productive in virtually every aspect of firm management.

For example, you have to process many kinds of forms — transmittal letters, 254 and 255 forms, field reports, change orders and more. Macintosh can help you save time and money by automating all of them.

- You can automate existing forms or design a variety of new forms like the transmittal letter you see here.

We know that bidding on government or public projects requires completed 255 form. We also know that it's usually left to the last minute because it's so tedious. However you can standardize this form on the Macintosh to make it much easier and quicker to complete.

- With all your firm information preset, the Macintosh can automatically fill in all necessary background data.
- The same is true for employee information. Simply select the employees who will be working on the project, input the relevant information on them and fill in the appropriate sections in the 255 form.

Imagine how this will facilitate ease-of-preparation and accuracy for these types of projects, and give you more time to devote to what you do best.

Do This

Open **Firm Management** folder.
Open **Forms** document.
Click **Transmittal Letter** icon. A standard transmittal form appears. ▶
Click **Menu** icon.
Click additional **forms** icons to view, then click **Menu** icon.
Choose **Quit** from File menu.

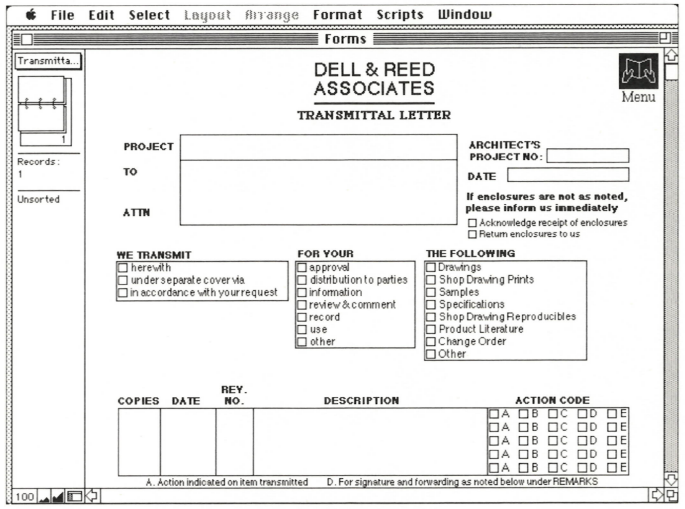
Open **255 Form** document. ▶
Choose **text** tool (**A** in toolbox).
Select **Sec03 Placeholder** in the Firm Name box and delete.
Choose **Actual size** from Page menu.
Type in customer's firm name and address.
Highlight new text.
Under **Type** menu, use **Type style** submenu to choose **Bold**.
Click to deselect new text. Note customized 255 form.
Choose **Quit** from File menu.
Choose **No** when Save Changes dialog box appears.

MediaTracks Do This

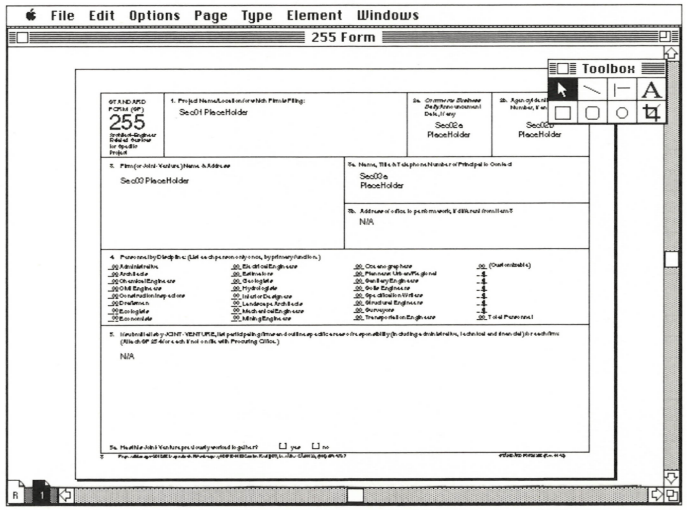
Click on **Firm Management** folder to launch demonstration.

Click on **play** button (▶) to continue throughout.

Show This

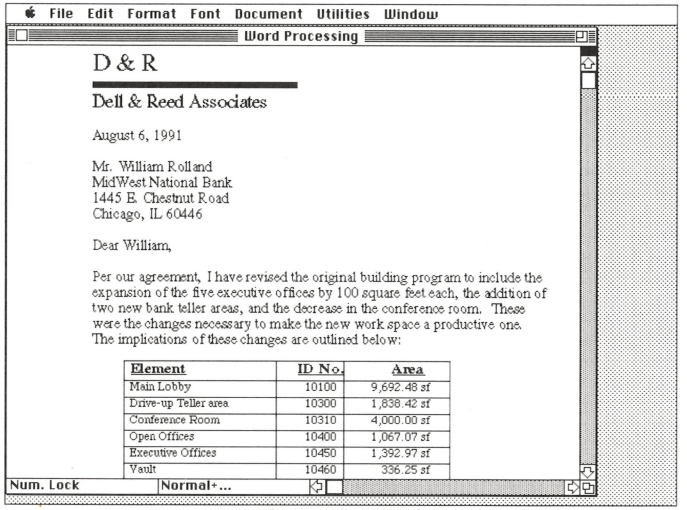
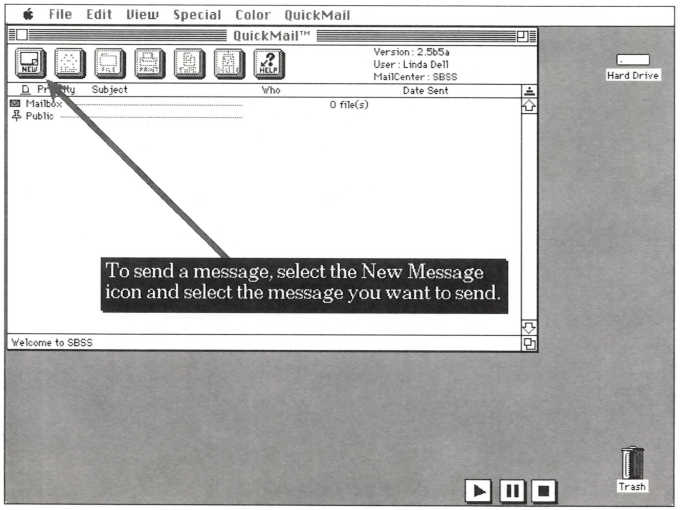


Application: FileMaker Pro

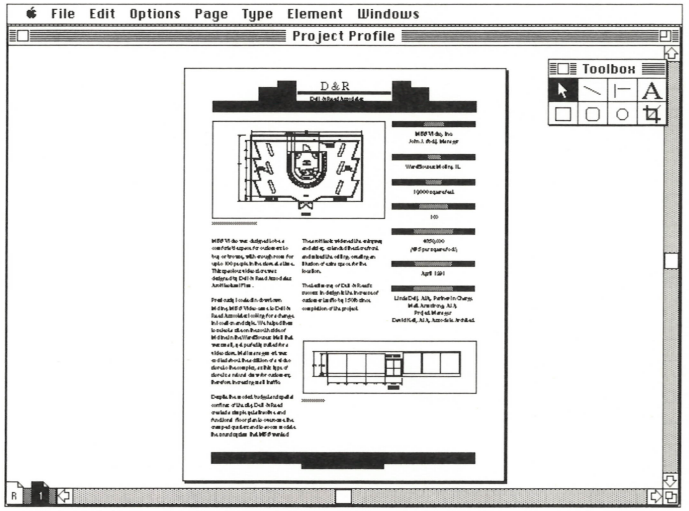
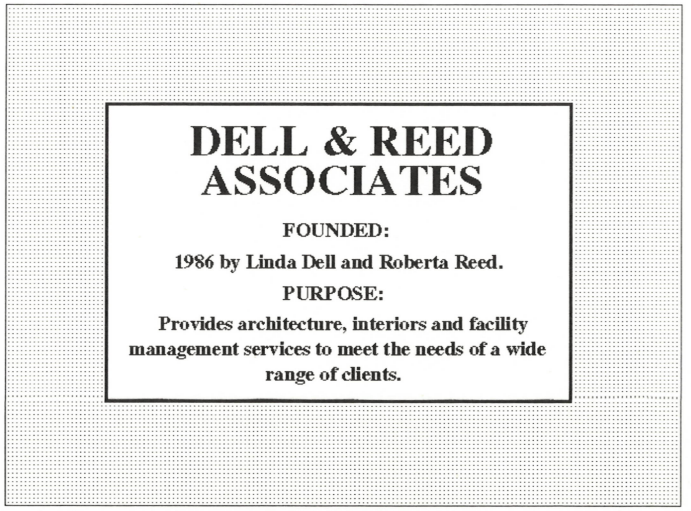


Application: PageMaker

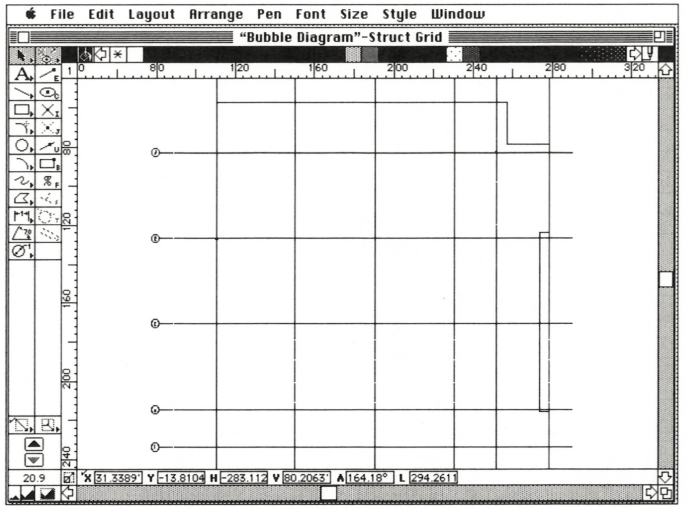
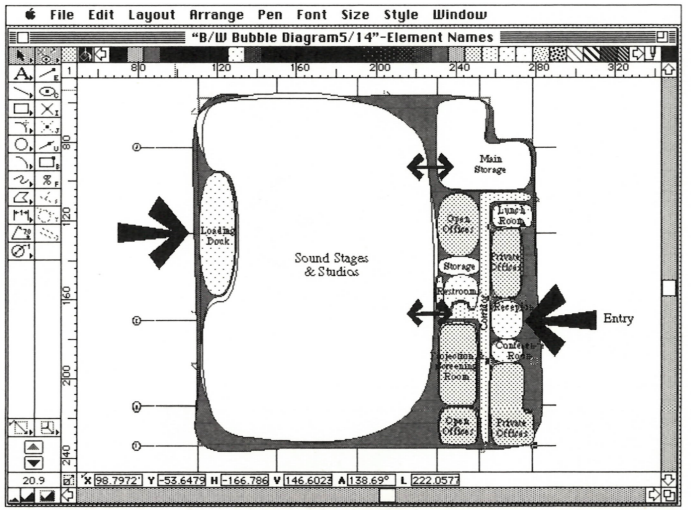
Firm Management

Say This	Do This	MediaTracks Do This	Show This
Macintosh can help automate the writing process and organize your thoughts. It gives you the tools and flexibility to achieve the quality look you want. • You can change a typestyle, use boldface for emphasis and check spelling. • You can also cut and paste copy, from one document to another. • With Macintosh, you can import data from other programs, too. Like the square footage data calculated in a building program. Then you can make calculations and changes to it without ever having to leave the word processing document.	Open **Word Processing** document. ▸ Demonstrate cutting & pasting, changing fonts and styles. Check spelling by selecting **Spelling** from Utilities menu. Click **Start Check** button. Click **OK** when End of Document dialog box appears. Change **Conference Room** in **Area** from 4,000 to 2,000. Delete Area column total. Highlight complete column, except total. Choose **Calculate** from Utilities menu. New total appears, boxed in lower left corner of screen. Click in **Total cell** of **Area** column. Choose **Paste** from Edit menu. New total appears. Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears.	•	 *Application: Microsoft Word*
Communicating electronically with everyone in your firm is efficient and reliable with Macintosh. Send messages instantly, instead of printing, photocopying and distributing them. You'll probably get responses back faster, too. • After typing in your message, select the send icon and indicate who you're sending the message to. You can also share files with others who work simultaneously on the same project. For example, you could electronically send shop drawings to a draftsman who can then work with the new dimensions immediately. Electronic mail can improve communications with clients, subcontractors and suppliers.	Open **Office Communications** document. Click on **play** button (▶) to continue throughout. ▸ Demo automatically returns to desktop. Close **Firm Management** folder.	• • • End of demonstration.	 *Application: MediaTracks/QuickMail*

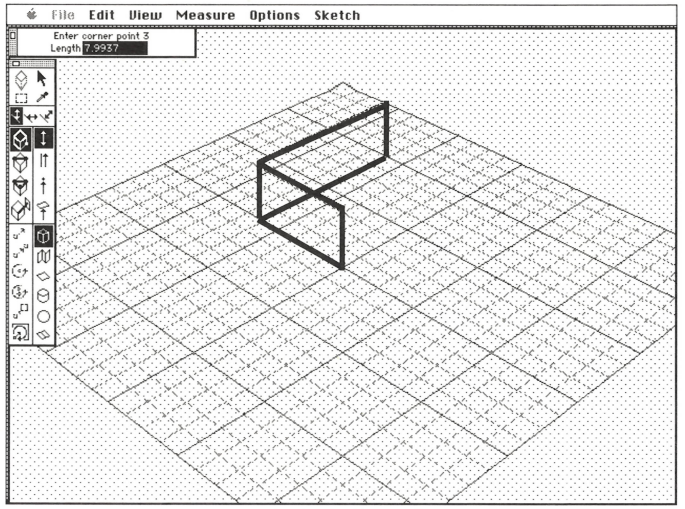
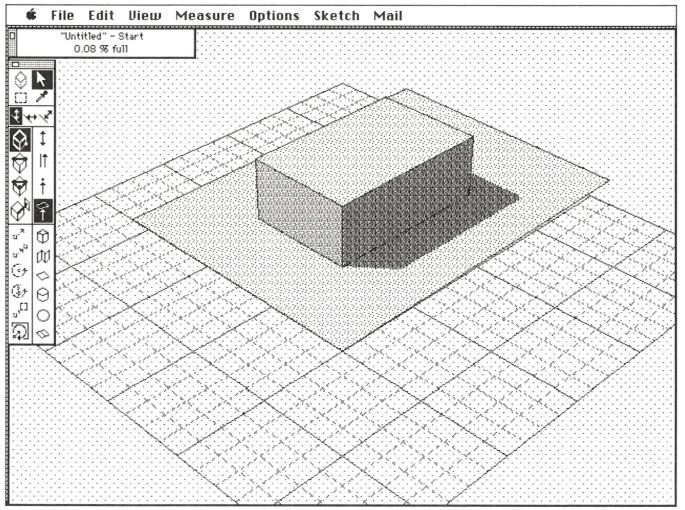
Marketing & Presentations

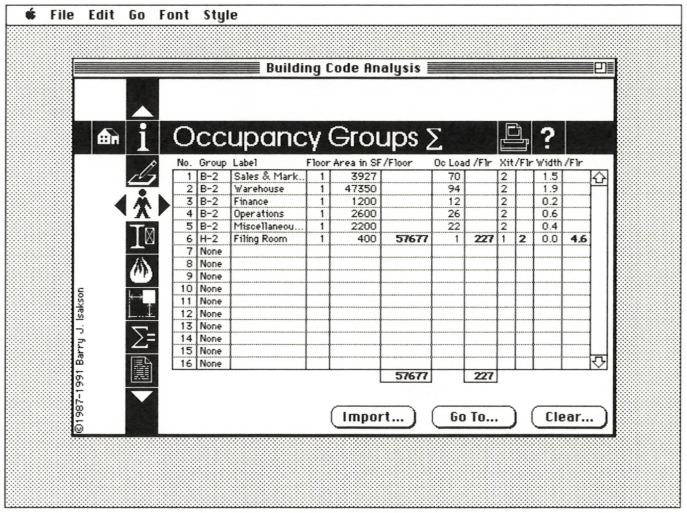
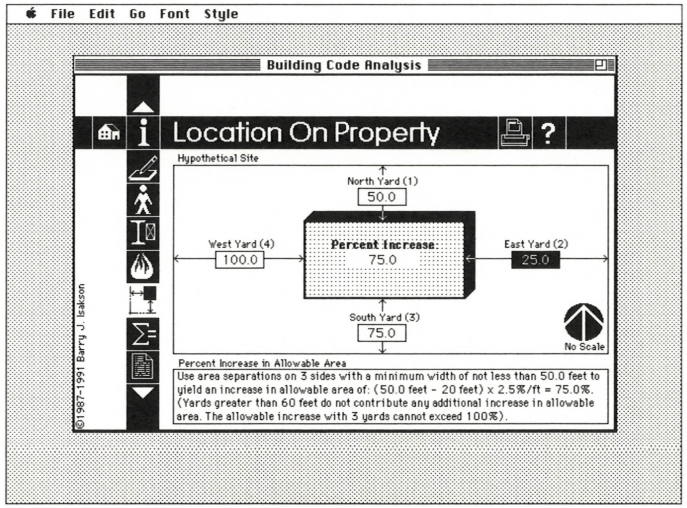
Say This	Do This	MediaTracks Do This	Show This
In today's competitive business environment, you're not only measured by the structures you've designed, but by how you present your firm's capabilities to potential clients.	Open **Marketing & Presentations** folder. Open **Project Profile** document. ▸	Click on **Marketing & Presentations** folder to launch demonstration.	
With Macintosh, you can develop professional-looking materials like project profiles in-house. They're the perfect way to showcase your abilities to potential clients and colleagues. • You'll be able to easily maintain and review profiles on all projects with just a few keystrokes. Once your project profiles are stored on your computer, you can select them as needed for a customized package to present to a prospective client.	Click text in first column. Choose **Edit story** from Edit menu. Editing window appears. Highlight first paragraph. Under **Type** menu, use **Type style** submenu to choose **Bold** and **Italic**. Close editing window. Choose **Actual size** from Page menu. Scroll to view text changes. Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears.	•	*Application: PageMaker*
Presentations are also vital to the success of your business — from showing your work to a prospective client to presenting design proposals. So why not maximize your capabilities with a Macintosh? • You can create high quality slides, overheads, proposals, or even in-house capabilities presentations to show your clients a variety of design ideas. You'll save time and money by creating your own presentations.	Open **Project Presentation** document. Choose **Slide show** from File menu. Click **OK** when Slide show options window appears. ▸ Slide show launches automatically. When done choose **Quit** from File menu.	•	*Project Presentation*  *Application: Aldus Persuasion*
Marketing has become a fact of life for your firms. Now, Macintosh can help make your marketing materials look every bit as good as your design work does.	Close **Marketing & Presentations** folder.	End of demonstration.	

Design Process

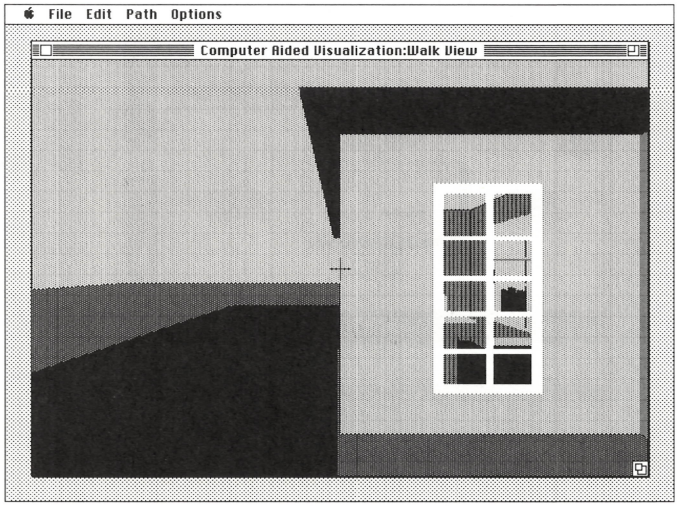
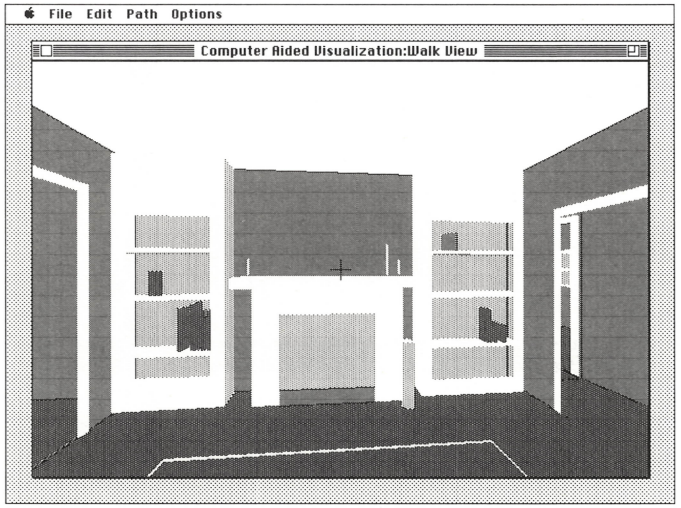
Say This	Do This	MediaTracks Do This	Show This
Macintosh computers have led the field for years with outstanding design capabilities combined with a friendly, intuitive user interface. We briefly looked at CAD capabilities earlier. Now let's look in more detail at how Macintosh can assist you in the entire design process.	Open **Design Process** folder. Open **Bubble Diagram** document. ▸ This file will demonstrate the ability to create layers in working drawings.	Click on **Design Process** folder to launch demonstration.	 *Application: ClarisCAD*
You know the kind of time, energy and thought that goes into a project, from the earliest concepts through the first day of occupancy. Macintosh flexibility and ease-of-use can encourage creativity in all project phases. • We will start with a floor plan on a structural grid as a guide. • As you click through the layers, you can see how Macintosh will help you to visualize your drawings.	Click upper **arrow** tool (⏏ – in lower left corner of screen) to view layers (indicated in title bar): 1st - shell. 2nd - tenant improvement walls. 3rd - new bubbles.	Click on **play** button (▶) to continue throughout.	
After you have drawn your bubbles, you can begin to manipulate them into working drawings. • Just add new bubbles for each building program element and show their relationship to one another and relative sizes. • By adding in circulation arrows, you can visually depict where the entries are and how people will move throughout the structure. • As a final draft, you can title the rooms to correspond with the building program you and your client developed earlier.	Click again on upper **arrow** tool (⏏ – in lower left corner of screen) to view additional layers (indicated in title bar): 4th - concept bubbles. 5th - circulation arrows. 6th - all element names. ▸ Choose **Quit** from File menu. Choose **No** when Save Changes dialog box appears.		 *Application: ClarisCAD*

Design Process

Say This	Do This	MediaTracks Do This	Show This
Much of your business revolves around great ideas. More often than not, the only place to jot it down is on a napkin or piece of paper. That's the thought behind this Macintosh application — it's very literally a 3D piece of paper that allows you to draw interactively and directly in three dimensions. • Macintosh handles sketches, shading, layers, shadow casting, integrated view capabilities and more. • You can wait to make decisions and changes until after the results appear on screen. This feature allows you to stay very interactive with your design.	Open **Conceptual Design** document. This file will create a 3D cube. Choose **box** tool (⬚ – sixth from bottom in right toolbox). Click anywhere on grid to select surface. Click center of grid. Move **cursor** to a height of approximately 3, then click once. Note how 3D wall is rubberbanded as the cursor moves around screen. Follow **grid line** to upper left corner of screen 5 units and click. Follow **grid line** to upper right corner 8 units and click. ▸ Follow **grid line** to lower right corner 5 units and double click. A shaded cube appears.	• • • • • • • • • • • •	 *Application: Upfront by Alias*
Once you've started to develop your ideas, it's important to visualize your project from all angles and with different lighting conditions. With Macintosh, you can turn hours of work into simple modifications and help your clients visualize these results, too. • Calculate shadows quickly on the most complex models, with the sun set to any time, day or location in the world. • You can also hierarchically organize objects on a spreadsheet of layers. Using a Macintosh will let you work efficiently with form, light and color in 3D environments. It's an ideal format for productive working sessions with your clients.	Now create a surface below the 3D cube. Select **surface** tool (◇ – fourth from bottom in right toolbox). Click anywhere on grid to select surface. Click next to the lower left of cube, click next to the upper left of cube, click next to the upper right of cube and double click next to the lower right of cube. Choose **Shadow** from Options menu. Click **Make Shadows** button. ▸ Choose **Close** from File menu, and choose **No** when Save Changes dialog box appears. Choose **Open** from File menu. Open **Complete Design** file from list. View completed conceptual design. Choose **Quit** from File menu.	• • • • • • • • • • • • •	 *Application: Upfront by Alias*

Say This	Do This	MediaTracks Do This	Show This
Checking building code compliance can require many hours of calculations. But with Macintosh, you can automatically look up and calculate occupancy description, occupant load factors, exit width and fire protection requirements, and allowable heights and areas. • You can quickly assess the impact of code requirements during the design phase. For example, you can change the area square footage and watch how it recalculates the total area, occupancy load and fire escapes needed. • The Macintosh allows you to create a report featuring applicable code information by section and page number.	Open **Building Code Analysis** document. Choose **Click Here to Continue**. Click **Occupancy Group(s)** icon (– third icon from top in toolbox). ▸ Click right **arrow** of Occupancy Group icon (◂ ▸). Change a number in the **Area (SF)** column and press **Return** key. Note how other numbers recalculate (e.g., total area, occupancy load, fire escapes).	•	 *Application: HyperCard/Building Code Analyst*
As you can see, there are a wide variety of calculations you can perform on the Macintosh — everything from construction type to fire protection. • As you know, code information about the building's location on property can also be specified by entering the yard dimensions around the building perimeter. Once all the data describing the building has been entered, it can then be summarized and printed into a report. Any code violations would be listed here. You'll save considerable time and money, and boost productivity as well. And you're likely to decrease code-related design errors.	Click **Location on Property** icon (– third from bottom in toolbox). Change **North Yard** number and press **Return** key. Note how the building percent increase in the center changes accordingly. ▸ Click **Report** icon (– bottom of toolbox). Click options you would like included in your report. Choose **Quit HyperCard** from File menu. Choose **No** if dialog box appears.	•	 *Application: HyperCard/Building Code Analyst*

Design Process

Say This	Do This	MediaTracks Do This	Show This
Beyond calculations, you can use a Macintosh to create building animations and design visualization. • See how you can move in from any angle to get a closer look at your work? • You can pan down and around to literally examine your building from top to bottom.	Open **Computer Aided Visualization** document. This file demonstrates the ability to view a 3D project from any angle. Click mouse to begin. ▸ Clicking above the crosshair in the center of your screen moves you forward, while clicking below the crosshair moves you backwards.	•	 *Application: Virtus WalkThrough*
Besides helping you improve the design process, this capability will let you offer your clients an exceptional view of a conceptual drawing. This is the type of Macintosh capability that will give you yet another edge on your competitors. From the first conceptual idea, through initial design, from working drawings through construction, Macintosh gives you all the tools you need to succeed. With your talents and this technology, your imagination is unlimited.	Hold down mouse to navigate around house interior and exterior. ▸ Choose **Quit** from File menu. Close **Design Process** folder.	• • • End of demonstration.	 *Application: Virtus WalkThrough*

Summary

Say This

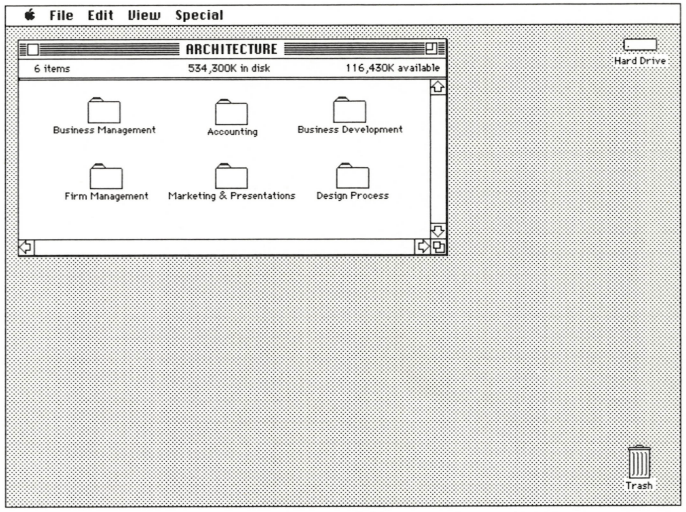
Today I've shown you how to manage your entire firm with one computer, the Macintosh. So whether you're scheduling project tasks, determining square footage, altering your design in CAD or managing your books, this tool will help make sure it's easy, affordable and only a click of the mouse away.

The Macintosh works the way you do. It adapts to your working environment, gives you more control over your business and provides solutions to virtually all of your business needs. It will help you create concepts, stretch your imagination and improve the quality of your finished design. And it offers a proven growth path for the future. That's the power of Macintosh. That's why it should be your computer.

Do This

MediaTracks Do This

Show This



SBSS Express Seminars
Business Solutions Directory: Architecture

Located on your SBSS Express Seminar CD is a HyperCard stack of Macintosh business solutions including Apple and third party software and hardware products called the Apple Business Solutions Directory. It includes detailed product descriptions, pricing, system requirements and developer contact information. Use this tool as an information resource to provide your customers with details about Macintosh applications that are available to meet their specific needs.

Here's a sample of the Architecture solutions found in the directory, more detailed information about these products are located on the CD:

Architrion II Series

Gimeor, Inc.
209 Harvard Street #308
Brookline, MA 02146
(617) 566-6315

Developed by architects, Architrion II Series 5.5 is an integrated CAD software package for Macintosh computers that provides the interface and features required by architects, interior designers, urban planners, and builders. Using Architrion II, designers are able to explore and present their most complex ideas using the three-dimensional design environment, ArchiDesign, and create preliminary drawing and contract documents quickly in the drafting module, ArchiDraw, and obtain quantity take off listings in ArchiList. In addition to automatically created plan, section and elevation views of the three-dimensional design, presentation capabilities include perspective, axonometric, and isometric views with shades and shadows, and animated walk-throughs and fly-bys.

Ashlar Vellum

Ashlar, Inc.
1290 Oakmead Parkway
Sunnyvale, CA 94086
(408) 746-3900

Ashlar Vellum CAD software eliminates on-screen guesswork and makes precision drafting as effortless as freehand sketching. Vellum's built-in intelligence has the full power of professional CAD, without complex commands or extensive training. The Drafting Assistant and such high-end CAD tools as integrated parametrics, associative dimensioning and detail views, and NURB splines help shorten the design cycle and increase productivity in mechanical engineering, design, drafting, graphics, and technical illustration.

ClarisCAD

Claris Corporation
5201 Patrick Henry Drive
Santa Clara, CA 95052
(408) 987-7000

ClarisCAD is the professional design and drafting tool for Macintosh personal computer users. ClarisCAD 2.0 combines a wealth of design and drafting capabilities with revolutionary extensions to the Macintosh user interface. ClarisCAD's graphic guide provides intelligent feedback during the drawing process so that creating accurate scale drawings is as easy and natural as hand sketching. The result is a solution that offers unprecedented ease of use and comprehensive two dimensional functionality to meet the needs of design and drafting professionals. ClarisCAD supports a number of printers and plotters, including Apple ImageWriter and LaserWriter printers and Hewlett-Packard and Texas Instruments plotters.

Proposal Manager•254/255

Wordscapes
4546 B-10 El Camino Real #177
Los Altos, CA 94022
(415) 968-8737

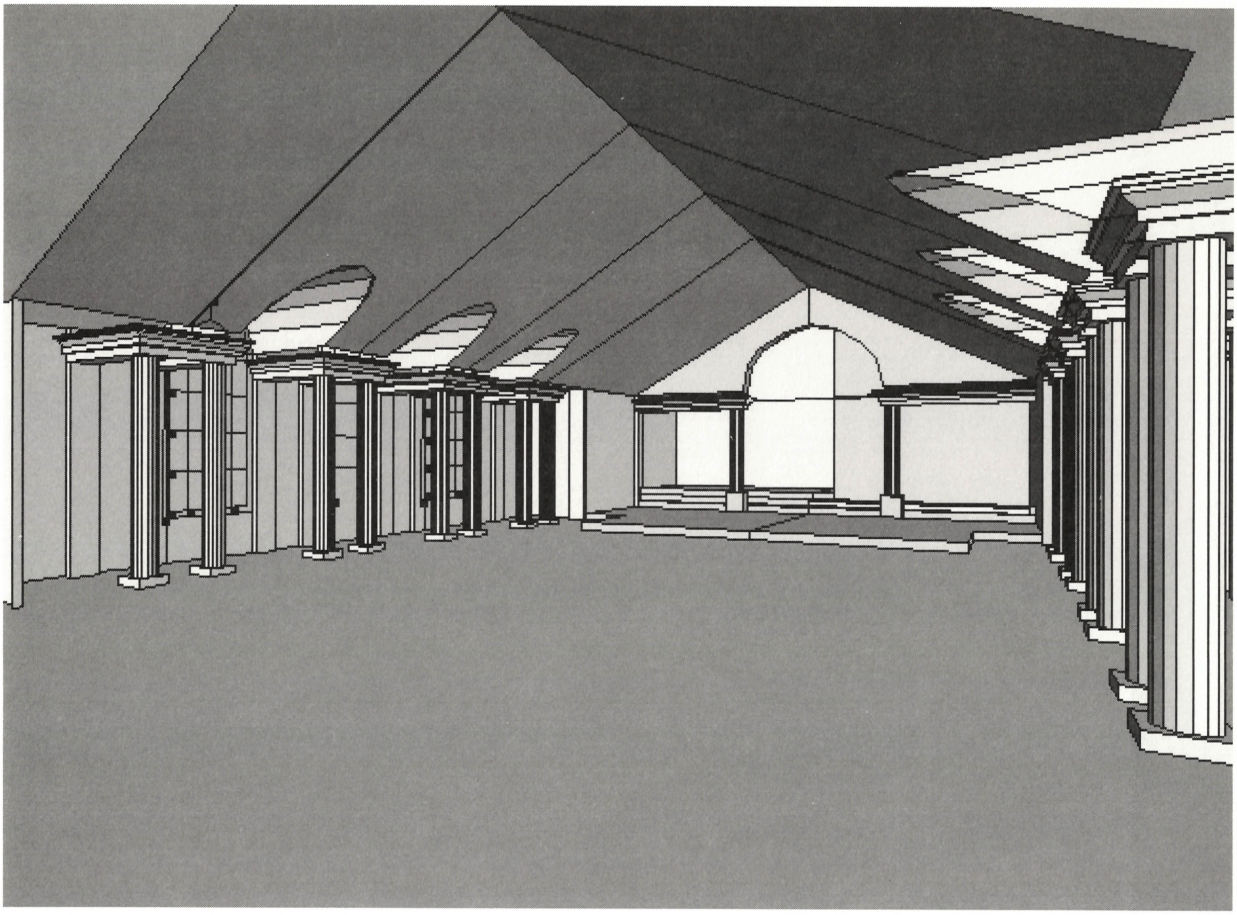
Proposal Manager•254/255 is marketing software for architecture and engineering professionals who want to manage and produce government forms 254/255 on the Macintosh. It is the first such product that tailors database functions into a PageMaker environment. Features include FileGenerator•PM (once project, consultant, and resume records are input, they can be placed into any future proposal); printing onto blank paper; full documentation and tutorial. Proposal Manager is designed by a licensed architect; is GSA acceptable; has WYSIWYG display of all forms; contains all sheets used in both 254 and 255 families, including alternate layout for expanded narrative.

Upfront by Alias

Alias Research, Inc.
110 Richmond Street E., Fifth Floor
Toronto, ONT M5C 1P1
(416) 362-9181

Upfront is an interactive three-dimensional drawing program for architects, facility planners, set designers, and others who need to see their ideas in 3D. The ideas developed and refined in Upfront are exported with full floating-point accuracy to computer-aided design (CAD) and desktop publishing (DTP) applications once the conceptual directions have been determined. Fast color shading, hidden surface removal, and fast shadows provide the Upfront user with instant visual feedback. The three-dimensional model can be matched with the perspective of a scanned background photograph. Perspectives, scaled plan, and elevation views can be printed at any size on a laser printer.

Mention of non-Apple products is for informational purposes only and constitutes neither an endorsement nor a recommendation. Apple assumes no responsibility with regard to the selection, performance, or use of the products. All understandings, agreements, or warranties take place directly between the vendors and the prospective users.



Shepley Bulfinch Richardson and Abbott, Architects

As an architecture firm, Shepley Bulfinch Richardson and Abbott designs hospitals, libraries, and other academic buildings. They have twenty-nine Macintosh computers ranging from the Macintosh Plus to the Macintosh IIci. The firm uses several storage systems such as Bernoulli and Dayna drives and tape systems from Exabyte and GCC. They use an Apple LaserWriter and a Versatec Electrostatic plotter for printing.

This document was created on a Macintosh II with 5 MB of RAM.

Shepley Bulfinch Richardson and Abbott uses ModelShop from Paracomp to study exterior and interior spaces of buildings. These drawings are used to study exterior proportions and massing as well as interior relations.

For more examples of materials created by small businesses using Macintosh computers, review the contents of the Made on Macintosh folder found on the SBSS Express Seminars CD.

© Copyright 1991, Shepley Bulfinch Richardson and Abbott, Inc.